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<u>REMARKS / DISCUSSION OF ISSUES</u>

Claims 1-6, 8-9, and 11 are pending in the application.

Claims 1-4 are amended for non-statutory reasons: to correct one or more informalities, remove figure label numbers, and/or to replace European-style claim phraseology with American-style claim language. The claims are not narrowed in scope and no new matter is added.

The Office action rejects claims 1-11 under 35 U.S.C. 102(b) over Payton (USP 5,790,935). The applicants respectfully traverse this rejection.

The Examiner's attention is requested to MPEP 2131, wherein it is stated:

"A claim is anticipated only if *each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The *identical invention* must be shown in as *complete detail* as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claim 1, upon which claims 2-4 depend, claims a method of modifying a first user's profile that includes, among other elements, modifying the first user's profile responsively to data from a second user's profile.

Payton does not teach modifying a first user's profile based on a second user's profile.

Payton teaches consideration of data from a first user's profile and a second user's profile to generate a recommendation, but Payton does not teach modifying the first user's profile based on the second user's profile. The Office action cites Payton's FIG. 7b, steps 166-172 for teaching modifying the first user's profile based on the second user's profile. The applicants respectfully disagree with this characterization of Payton. As illustrated in Payton's FIG. 7b, the subscriber's (first user's) profile is updated at step 164, based on the subscriber's most recent profile (step 160) and any recent on-demand requests (step 162). This step 164 is the only step in FIG. 7b that updates the subscriber's profile, and occurs in Payton's sequence

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before the similarity groups (second users) are determined (step 166). Because Payton's subscriber's profile is updated before the second users are identified, the applicants respectfully maintain that Payton cannot be said to teach modifying the first user's profile responsively to data from a second user's profile, as specifically claimed in claim 1.

Because Payton fails to teach all of the elements of the applicants' claim 1, upon which claims 2-4 depend, the applicants respectfully maintain that the rejection of claims 1-4 under 35 U.S.C. 102(b) over Payton is unfounded, per MPEP 2131.

Claim 5, upon which claims 6 and 8 depend, claims a method of modifying a first user's profile that includes, among other elements, modifying the first user's profile responsively to user feedback to test-data based on a second user's profile, wherein selecting the test-data includes selecting primarily test-data for which the first user's user profile is insufficient for the recommender to determine whether the test-data would be favored or disfavored.

Payton does not teach selecting primarily test-data for which the first user's user profile is insufficient for the recommender to determine whether the test-data would be favored or disfavored.

The Office action asserts that Payton's recommendations based on the subscriber's profile and similar users' profiles correspond to the claimed test-data, and asserts that Payton teaches selecting primarily test-data for which the first user's user profile is insufficient at column 9, lines 14-48. The applicants respectfully disagree with this assertion.

Within the cited text, Payton specifically teaches:

> "Only items rated by both subscribers are used to compute the measure. Predictions are then made by considering all subscribers with a dissimilarity to the subscriber which is less than a threshold. The subscriber's predicted rating is computed as a weighted average of the ratings provided by these most similar subscribers, where the weights are inversely proportional to the dissimilarity." (Payton, column 9, lines 19-25.)

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That is, Payton specifically teaches that the only items considered are items for which the subscriber has provided a rating. Given that the subscriber has provided a rating on the item, the recommender will know whether the item is favored or unfavored by the subscriber. Additionally, Payton's weighting based on an inverse proportion to the dissimilarity between subscribers will have the result of reinforcing the user's preferences, by applying higher weights to similar preferences of the other subscriber.

Payton's recommender is intended to provide recommendations that are more likely to be favorable to the user than other recommendations. Providing test-data for which the recommender has little or no information for making a favorable or disfavorable determination, as claimed in claim 5, is contrary to Payton's teachings.

Because Payton fails to teach all of the elements of the applicants' claim 5, upon which claims 6 and 8 depend, the applicants respectfully maintain that the rejection of claims 5, 6, and 8 under 35 U.S.C. 102(b) over Payton is unfounded, per MPEP 2131.

Claim 9, upon which claim 11 depends, claims a data-class recommender that includes, among other elements, a learning engine that is programmed such that the first user profile includes a narrow description defining target data selections and a broad description defining non-target data selections, and provides recommendations derived from a space of selections lying between the broad and narrow descriptions.

Payton does not teach the above referenced learning engine.

The Office action asserts that Payton's rating system, from high rating to low rating corresponds to the applicants' narrow and broad descriptions, respectively. The applicants respectfully disagree with this characterization of Payton. The applicants respectfully maintain that a numerical rating of a data selection, as taught by Payton, does not constitute a description defining data selections, as the term description is commonly used in the art, and as the term is used in the applicants' disclosure. For example, in the Summary of the Invention, the applicants describe a version space algorithm, which "saves two descriptions of all the possible choices

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available in a database (i.e., the "choice space"): (1) a general description that is the broadest description of the choice space excludes all negative choices and (2) a specialized description that is the narrowest description that embraces all positive examples in the choice space." Further, the applicants specifically use the terms "broad" and "narrow" to describe these descriptions; the applicants respectfully maintain that a numerical rating cannot be termed "broad" or "narrow". That is, for example, a rating of "5" cannot be said to be broader or narrower than a rating of "2", as the terms broad and narrow are conventionally defined. Conversely, a description such as "all movies except westerns" can be characterized as being broader than a description such as "only dramatic movies".

Because Payton fails to teach all of the elements of the applicants' claim 9, upon which claim 11 depends, the applicants respectfully maintain that the rejection of claims 9 and 11 under 35 U.S.C. 102(b) over Payton is unfounded, per MPEP 2131.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the rejections of record, allow all the pending claims, and find the application to be in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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